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ABORIGINAL ANTIQUITIES IN SAINT KITTS AND NEVIS

By C. W. BRANCH

Introduction

The islands of St Kitts, or St Christopher, and Nevis, in the Lesser Antilles, though very small, are singularly rich in traces of Indian occupancy. St Kitts, we may infer from the name given it by the Caribs — *Llamuiga*, said to mean 'the fertile,'— was a favorite resort of those Indians.

At their discovery by the Spaniards the Lesser Antilles were all inhabited by the warlike Caribs, who remained in possession until displaced by the English and French settlers in the seventeenth century. Whatever may have been the origin of these Indians, there is no doubt that they must have displaced others in turn. This may be inferred from the analogy of all other races of whom the history is known, from their own traditions, and perhaps from the curious fact of their having two languages spoken by the men and the women respectively. We may therefore take it for granted that the traces found may represent successive occupancy by at least two different peoples. Mr im Thurn, in British Guiana, has been able in some instances to distinguish the relics of the late-coming Caribs from those of the aborigines; but nowhere in the West Indies has such a segregation yet been found possible.

The study of specimens from the Lesser Antilles has been limited almost to the Guesde collection¹ and the objects described by Mr im Thurn.² More careful search will reveal the shell implements and ornaments, the pottery, and the burials in these islands; and no doubt as investigations are continued the history and relations of the tribes will in time be determined. The writer hopes

¹O. T. Mason, The Guesde Collection of Antiquities, Smithsonian Report for 1884, Washington, 1885.

² West Indian Stone Implements, Timehri, vols. I, II, III.

that the facts collected by him, which are new as regards these two islands, will be accepted as of sufficient importance in themselves, although he may not attempt to offer any explanation of their origin.

In St Kitts and Nevis, as in every other West Indian island, stone implements have been found ever since their settlement by Europeans, and as the memory of the Indians died out, their origin was attributed to the agency of thunder. This curious piece of folklore, which seems to be universal where the stone-age has been forgotten, has aroused the indignation of Mr im Thurn, though treated more philosophically by Stevens. No large collection of these stones has been made, unless we except that of Mr E. Connell of Nevis, which is here included. Very many specimens have become dispersed, some no doubt to find their way info museums, there to be attributed to wrong localities and so still more to entangle the already difficult problems in the ethnology of the West Indies.

Four pictured rocks have long been known in St Kitts. Years ago the writer picked up a conch-shell celt, which was the first known from St Kitts; but many such have since been found. In 1895 a laborer directed the attention of Mr Philip Todd to some bones and fragments of pottery in a gut-side at West-farm, St Kitts. These were presented to Dr W. J. Branch and noted in *Nature*. In 1896, as the result of long-continued search over the island, the writer observed a kitchen-midden at Stone-fort, and subsequently has located similar deposits at five other places in St Kitts. In 1897, while the "picture stone" at Hart's bay was being photographed, another etched rock was found near by. During a few weeks' stay in Nevis in 1897, the writer located two middens and recovered a few specimens from them.

By the kindness of Mr Connell the description and photographs of the stone implements appearing in this paper are taken chiefly from local specimens in his collection.

The work of systematic excavation in the middens has not yet been undertaken, but in the course of frequent visits, when the author conducted some desultory digging, a number of pottery fragments and a few shell objects were collected.

STONE OBJECTS

Form and character. — All the specimens here described were found on the surface, and with few exceptions bear only a vague record of locality. They are characterized by their symmetry of form and careful finish, but on the whole they do not show the complexity of design and high degree of polish seen in museum specimens. As already intimated, only the finest specimens are usually collected and find their way to the museums. In the Connell collection, and also in that of Dr W. J. Branch, there are a large number of simple forms, fashioned from coarse stone as neatly as the material will allow, indicating that the usual working tools were not elaborately made.

Mullers and Rubbers. — Mr im Thurn, though at first opposed to the idea that the Indians of the islands used maize, admits later that such may have been the case. Robertson criticizes the statement of Acosta that maize, though cultivated on the continent, was not known to the islanders, and in support of his criticism cites Peter Martyr, Gomara, and Oviedo on the use of maize in the West Indies at the time of their discovery.

The extraordinary number of implements of the grinding class found in these two islands show that they were in constant requisition for preparing maize; no grinding of paint or even of clay for pottery could have demanded such a number of tools. Cassava, the chief food of the Carib according to the early writers, does not require pounding, nor is it best prepared by such treatment. The use of maize only seems to explain the occurrence of such a large number of mullers. The small specimens were no doubt used for grinding colors and condiments. The mullers vary greatly in form; indeed scarcely any two are identical in size and shape, although they are similiar in being made of coarse stone, generally the softer varieties of the usual andesite of the islands being employed.

The simplest type of muller is the conical variety, which may be ovoid with a pointed apex, or straight-sided, the latter being sometimes flat at the apex. In section the tools of this type may be

¹ West Indian Stone Implements, op cit., pt. 1.

² History of America, vol II, note 32.

³ J. Davies, History of the Caribby Islands.

circular or elliptical. The most ovoid specimens have usually a shallow depression in the center of the base. Common examples are figured on plate xxi, 4, 6, 7, 8, 9, and 10. Some of the elongate specimens are compressed toward the base, and appear to have been large celts adapted for use as pestles after the edge had become worn down. No. 5 of the same plate is almost cylindrical. Plate xxii, 8, of hard black stone, has an oblique concave base, and was probably used for smoothing other stone objects.

The first departure from this simple conical shape is a slight constriction near the apex, which, in the specimens illustrated (pl. xxi, 1, 2, 3), are truncated and narrow. The first of these shows the beginning of the next stage, the expansion of the base.

The third type is shown in plate xx1, figs. 26–29, 31, 32. These are all characterized by a more or less expanded base. In section they are elongate elliptical, except that shown in figure 32 of the plate which was circular, but is broken. The conical apex may be acute or truncated, as in the first or simplest type. The base is usually very convex, especially in its long axis. Figure 31 of this plate is a curious little object of this class with an exaggerated base. It is difficult to say to what use the specimen shown in figure 30 could have been put; it is less than an inch thick at the base and has a very thin awkward handle.

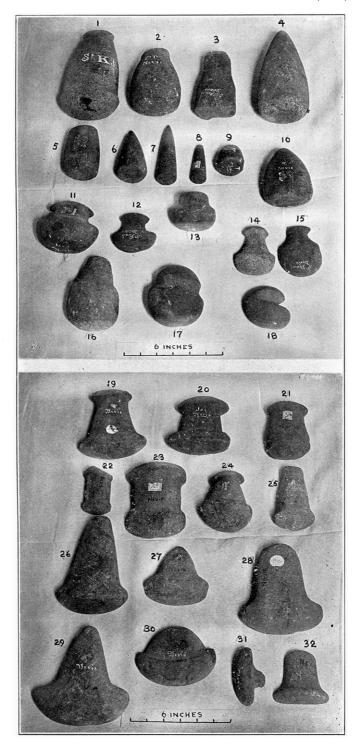
In the fourth type the apex as well as the base is expanded in order to afford a better grip. Plate XXI, 19-21, 24, and 25, illustrate this form. In figure 21 the expansion of the base has been removed, probably after the implement was broken, so as to restore the symmetry.

The two objects shown in plate xxI, 22, 23, represent a somewhat rare type in which the apex and the base are equal, giving the implements somewhat the shape of a dumb-bell. This probably has its prototype in the cylindrical form shown in No. 5 of the same plate.

A rare form of muller, having the conical apex curled over either laterally or longitudinally, is seen in plate XXII, 1, 2, 6, and 10.

Hammerstones. — This form of implement includes some carefully worked specimens resembling the third and fourth types of mullers; they are too short to hold in the hand, but are admirably adapted for hafting (pl. XXI, II, I2, I3, I4, I6). Like most of the

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STONE OBJECTS IN THE CONNELL COLLECTION

muller class of implements these are made of coarse-grain stone, and perhaps were used as maces or club-heads. Water-worn pebbles of dense hard stone, grooved by pecking, are represented in plate xxi, 17, 18. The latter specimen has the groove only half-way around. Otherwise these hammerstones are not worked.

Celts. — Included under this head are the petaloid and Scandinavian types of celt, and wedges. With one exception they are all of hard stone and are finely polished. Some of the smaller ones (pl. XXIII, 7, 14, 15) bear on the apex evident marks of battering. showing their use as wedges, while others, being thicker at the apex, are of decided wedge shape (pl. XXIII, 9, 10). In addition to the usual curved edge, some of the larger celts have a small beveled edge at the apex (pl. XXIII, 17). The exception noted above as being of soft stone is shown in figure I of the same plate, and was found by Mr W. Maynard at New River, in Nevis, while trenching to lay a pipe. The writer subsequently found the place to be a midden. This celt is of the Scandinavian type, unusual in stone in St Kitts and Nevis, although common in shell; it is of sandstone, incapable of being polished and rather soft, one would think, for cutting wood. Mr im Thurn is of opinion that objects of this type in the West Indies were intended for weapons and not for tools.

Hatchets. — Mr im Thurn objects to the term axe as applied to stone, and divides implements of this general type into adzes, wedges, and battle-axes. There is, however, abundant testimony by early travelers that savages did use stone axes to fell trees, etc. He considers that the broad blades (pl. XXI, 15; pl. XXII, 7; and pl. XXIII, 19, 20) are adzes and were used for hollowing out tree-trunks after the wood had been charred. But these tools are not usually made of such hard stone as the petaloid celts and consequently are less suited for cutting wood than for chopping flesh; besides, these broad hatchet blades are, in form, the most elaborate of all the implements, and are often decorated with a degree of care that is far more likely to be bestowed upon weapons than on mere tools meant for everyday use. That many celts were used also as weapons is more than likely, while on the other hand the hatchet blades (pl. XXI, 15; pl. XXII, 7) are extremely blunted, so that even if originally intended for use as weapons they must have been put to

more commonplace use on occasion. A fine blade of simple form and with two side nicks, from St Kitts, is figured in im Thurn's West Indian Stone Implements (plate VIII, 6).

Other stone objects. — Plate XXII, 4, represents a beautiful little blade of hard dense stone, 8 ½ inches long, three-fourths of an inch broad, and three-eighths of an inch thick, pointed at both ends and carefully smoothed though not polished. It is almost too brittle for use as a weapon, for since being in the collection it was accidentally broken by a slight blow; nevertheless, protected for most of its length in a hilt of soft wood or hide bound on wet, it may have served the purpose of a dagger. A somewhat similar but larger object is figured by Mr Duerden, and a specimen identical in form with the one from Jamaica is in the collections of the Canadian Institute.

Plate XXIII, 18, shows a sickle-shape cutting implement, with keen edges at the extreme tip of the smaller end and at the convex margin of the larger end. It may be grasped comfortably at the middle. For skinning and cutting up human flesh this implement would have proved very convenient.

Plate XXII, 3, shows a roughly shaped object, without any attempt at finish, provided with a curved groove along the face of the base. It was probably used for smoothing or sharpening other stone and shell implements.

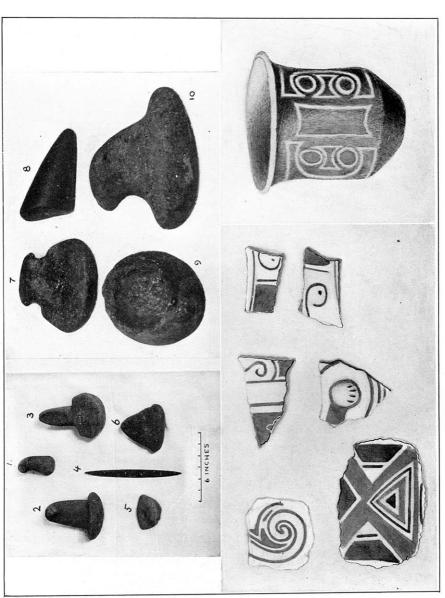
Figure 5 of plate XXII, from St Kitts, is of whitish sedimentary rock, different from anything known on the two islands. It has a groove along the thicker straight margin and pits for the fingers on the sides. It may have been intended for smoothing arrowshafts or other woodwork.

Plate XXIII, 21, is apparently half of one of the objects vaguely known as "banner-stones," this one perhaps having been of the "butterfly-stone" shape. An attempt at ornamentation has been made by pecking the smoothed surface so as to produce a pattern by contrast. This style of work is seen on some elaborate hatchet heads from other islands.³

¹ Indian Remains in Jamaica, fig. 8.

² Report for 1897.

³ See West Indian Stone Implements, op. cit.



Conneil Collection. Decorated Pottery Fragments.

Figs. 7 and 9 in Possession of Mrs Huggins, of Nevis. Pottery Vessel, Restored.

Plate XXIII, 22, 23, illustrate amulets or charms. It has been suggested that the former represents a vulva, but until more definite evidence of the existence of phallic customs or rites in the West Indies is adduced, we must be content to regard it, like figure 23, as an amulet of unknown signification. The perforation in each of these cases was produced by rubbing a groove on each side till they met, and not by drilling. Figure 24 of the same plate exhibits a bulky crescentic object of considerable thickness. Its function is not known, unless it be an unusual form of rubber or grinder.

Plate XXIII, 25, shows a coarse, much-worn mortar from Nevis. Plate XXII, 9, is a beautiful little oval mortar or stone bowl in the possession of Mrs Huggins. On the near end may be seen a neatly drilled hole; at the opposite end the edge is deficient. Mr im Thurn figures a tiny mortar from St Kitts. With respect to the holes in the Nevis mortar, there can be no doubt that they were drilled. There is an oval stone mortar from St Barts, similar to this one, but without the holes, in the possession of Dr W. J. Branch. In the Connell collection there is a stone

"sinker" from Nevis neatly perforated at the small end by drilling from opposite sides.

Figure 21 illustrates a rather remarkable object of somewhat coarse-grained black stone, found by a fisherman in Nevis in 1897 under a shore-cliff where the earth falls from time to time. This implement, or whatever it is, for we can form no idea of its meaning, is 9½ inches long by 4 inches across the head. The butt is an inch and a fourth in diameter and cut square with the sides. The head is set somewhat obliquely to the shaft, and is nearly triangular in section; the upper edge is not sharp.

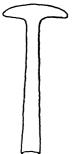


FIG. 21.—Problematical object of stone, from Nevis.

At the Two-mile Hill midden there was found a fragment of an object made of soft sedimentary rock; it is a corner of a thin plate, three-sixteenths of an inch thick and slightly concave. Such a tool may have been used to smooth the surface of pottery before drying.

From the surface of the St Johns midden was procured a fragment of a baking slab of stone resembling the baking tiles of which numerous fragments were seen at the same spot. Originally the slab must have been circular, about two feet across, three-fourths of an inch thick in the middle, and an inch and three-fourths at the edge.

Half of a biconcave, elongate, oval mealing-stone was found at Stonecastle in St Kitts. The object was originally about two feet long by ten inches broad. One side is more hollowed than the other.

Flint-flakes. — These occur frequently in all the middens, but none have been found reduced to any definite shape. Similar flakes have been recovered from excavations in Jamaica and Demerara, and from their frequency and the freshness of their fracture, artificial origin is indicated. The local flint occurs as nodules, with a thick whitish incrustation, in the shingle of some beaches, being



FIG. 22. — Worked flint, two sides; St Kitts. (%)

derived from the shore cliffs of clay conglomerate. It breaks with very sharp edges, almost as sharp as glass. The flakes in the middens had been almost certainly used as scrapers and knives.

In January, 1898, there was found in Dr Branch's garden in Basseterre a flint apparently of purposive form (fig. 22). The blade in section is triangular, but not exactly symmetrical, one side being longer; the back is chipped

down so as to make a flat surface, which may have been attached to a haft; there is a neat nick at the base; the cutting edge is sharp, but minutely notched by use.

SHELL IMPLEMENTS

As before mentioned, celt-like blades of shell have been found in some abundance in St Kitts, and are just as common in Nevis, though the Connell collection has only about five specimens. The writer is not prepared to agree with the statement that fossil shells from the limestone were used for this purpose. Examination of a large number of specimens from Barbados seems to show the identity of their condition with those of St Kitts, especially in cases

¹ im Thurn, Among the Indians of Guiana.

where the latter have been exposed on the surface. There is but little limestone in St Kitts, and none in Nevis, and although the writer has often hunted for fossils, he has never seen a strombus, so that this species must be comparatively rare in the limestone. The St Kitts objects are certainly made from fresh shell, as are probably also those from Barbados.

The common form of adze in Barbados was cut out of the columellar or inner lip of the king-conch (*Strombus gigas*). The anterior end of this lip is upturned to form the canal, and it is this curve that gives the peculiar twist to the end of this form of implement, which Mr im Thurn has aptly called the "shoe-horn" type. From the nature of the shell the cutting edge is necessarily gouge-like. The rare stone gouges sometimes found in the West Indies are probably imitated from the shell tool.

The shoe-horn type is rare in St Kitts. Most of the shell implements here are made from the broadly expanded outer lip of the king-conch. In most cases this is roughly chipped into shape, and care is taken only with the edge. The parallel furrows on the external surface of the shell are sometimes half rubbed down, giving the appearance which Mr im Thurn has mistaken for artificial grooving, but which is perfectly familiar to one acquainted with the shell. A number of tools of a better class occur, the writer is inclined to think, more commonly in the middens than on the surface, though this may be due merely to the destruction of the surface specimens by weathering and tillage. They are carefully ground to the petaloid celt or Scandinavian shape; occasionally they are almost triangular, and broad in proportion to length. Like the celts, the shell implements are of various sizes, from large unsmoothed specimens six inches long to nicely made chisels two and a half inches by half an inch, and neat little wedges two inches long.

A fact worthy of note is that a few short stout wedges are made from the outer lip of the *Strombus accipitrinus*. Rarely long narrow chisels were shaped out of the outer lip of the *Cassis tuberosa*.

Many of the shell adzes found in the middens are quite perfect, their edges not being blunt. It being fairly easy to grind these tools, they were probably kept in good order; and as they were little liable to serious breaking, in this respect unlike stone implements, but few damaged tools would have to be discarded.

From the Christ-church midden was taken a scoop made from the body-whorl of the *Cypræa exanthema*. This part of the shell would make an excellent spoon, but in this case half of it has been removed and the edge sharply beveled (fig. 23). The small end, where a handle may have been affixed, is broken. The scoop is an inch and three-fourths broad and was originally two inches long. On the surface of the Two-mile Hill midden was found a shallow spoon, cut out of the body-whorl of a king-conch. It is two and a half inches by nearly two inches, and about a quarter of an inch deep internally.

ORNAMENTS

A single bead of elongated barrel shape, 11 mm. by 5.5 mm., polished and neatly perforated through its long axis, was taken from the Christ-church midden by the writer. It is of opaque white



Fig. 23. — Shell scoop, Christchurch midden. (1/4)



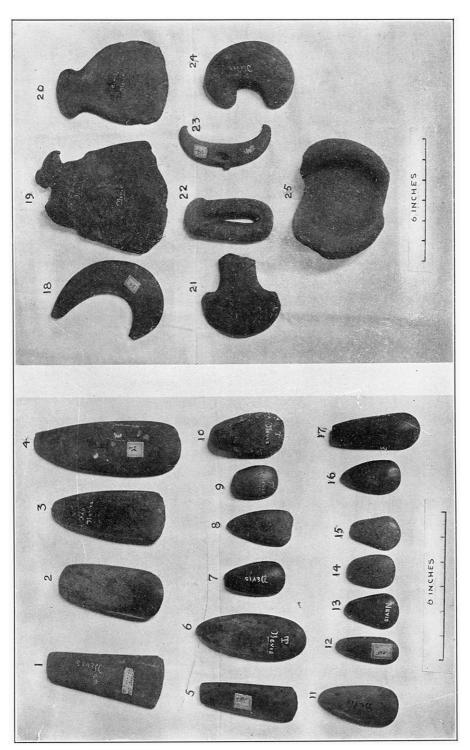
Fig. 24. — Shell amulet from St John's midden. (Nat. size.)

stone, probably quartz, with veins of hornblende. Mr im Thurn figures a shell pendant, shaped like a jaguar's tooth, from Nevis; it is half perforated from each side at one end, but the perforations do not meet.

From the Christ-church midden was also taken the flat valve of a red *Spondylus* with a small hole that was certainly artificially punched.

Figure 24 shows a curious object of conch-shell from the surface of St John's midden. It represents the head of a bird and is worked exactly alike on both sides. Whether merely ornamental or of symbolic significance is not known.

Many of the small shells, which occur in abundance in the middens, have been examined and compared but without establishing any probability of artificial perforation.



POTTERY

The only entire examples of the potter's art yet found were in the Indian grave previously mentioned. The specimens discovered in this deposit (pl. XXIV, A) are (I) an oval bowl, 9½ inches by 6 inches and 3¾ inches deep, with a simple handle at each end, made of coarse dark earth, badly fired, and without ornamentation. (2) A platter, 8 inches by 7 inches, with the lip continued into a spirally curved, perforated handle; there are circular incised lines on the inner surface, extending into the spiral of the handle, and externally a small perforated boss for a suspending string. (3) A number of fragments, most of which have been pieced together so as to render a complete restoration possible (lower right-hand figure of pl. XXII). Thus restored the sherds are seen to be parts of a jar 12½ inches high by 13¼ inches in diameter at the rim. There is a simple pattern in white paint applied directly to the well-baked clay.

All of the pottery from the middens is very fragmentary. Only a few pieces are in a condition to indicate with certainty the character of the vessels (in these cases always small) of which they form parts; but in other instances it has been possible, by careful measurements and plotting of curves, to restore the original shapes from single fragments with more or less probability of truth.

There is also considerable variety in technique, but probably only in accordance with the uses for which the earthenware was designed. Thus, the coarse unpainted sherds of cooking-pots and baking-slabs are so irregular as to indicate that these articles were modeled as is now done by the negroes in Nevis; while some of the lips and reflected edges of jars and basins are finished almost with the trueness of wheel-turned pottery, showing a high degree of skill in coiling.

There is considerable variety in the forms of the lips of ceramic objects, and as many of them were made with great care, the diversity cannot be attributed to chance. It certainly indicates a degree of individuality of invention on the part of the potters, or at any rate a selection guided by the taste of each artist. The varieties are represented in the accompanying outlines (fig. 25). Numbers 9, 11, 12, 13, 14, and 16 are of dark unpainted ware, some of the pieces

being ornamented with incisions. Numbers 1, 2, 5, 8, 15, 17, 18, 21, 22, and 23 show rims of red painted vessels, some with a thick layer of paint, others with a well applied slip. The remainder are from specimens with patterns painted on the plain smoothed surface of clay, without a slip.

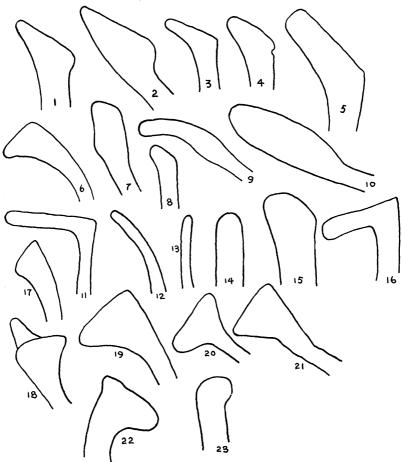


Fig. 25. — Sections of lips of pottery vessels. The right is the inner side in each case. (3/4)

The surface of the pottery was often carefully smoothed, especially where paint was to be applied. In other cases the general inequality was rubbed down, but the marks of the smoothing tool are

plainly visible. Some sherds of dark clay show that the vessels were apparently purposely roughened on the outside by drawing a rough piece of wood or coral over the damp clay. The under side of baking tiles is left untouched.

On some vessels red paint is applied thickly over the whole outside or the whole inside, but rarely over both. A thin slip of red paint occurs on other pieces, well fired in so as not to appear as a distinct layer, as is the case with the thick paint, which is now cracking off. A slip of light red, well baked, is also found, but only on highly finished articles. A few very small sherds of unusual thickness, an inch or more, have a cream paint on one side.

The firing of the pottery also varies. The most carefully smoothed objects are extremely well burned, but the direct action of the flame is suggested by discoloration in some cases. The common coarse pots are very friable.

Ornamentation is achieved by means of incised lines and paint. It occurs naturally on the parts most exposed to view—the outside of jars, the inside of platters, and the expanded lips of basins.

The incised patterns are all conventional, consisting mostly of straight lines, hatching, and sometimes dots (fig. 26). This form of decoration is found on thin unpainted ware of dark clay. Incisions are occasionally employed on thick painted vessels to define the painted areas. Deep squarely cut grooves, and wide modeled furrows occur on a few sherds of red-painted ware. One or



Fig. 26.—Incised patterns on pottery.

more circular incised lines were drawn in the bottom of vessels of open shape.

Painted patterns are also conventional; they are made up mostly of spirals and curves, along with straight lines, as shown in the lower left-hand figure of plate XXII. The patterns are in white or sometimes light blue, on a red ground or on the unpainted reddish clay. One example of an angular pattern is executed in white and light red on dark red. The thick rim of unpainted vessels is usually

painted dark red. A walnut-black stain, probably of vegetal origin, is used inside the lips of basins. The colors used are vermilion, light red, and dark red for slips (orange occurs on part of one well finished article); white and light blue for patterns; and the black stain mentioned above.

The examples of modeling and luting thus far found are almost entirely restricted to handles, which consist of simple ears and bosses and the common loop. A fragment of an earthenware human mask was obtained, showing in part the method of face painting. The skin is of chocolate color, the lips vermilion, and the pattern is in white (fig. 27). Figure 28 shows what seems to be a handle in



Fig. 27. — Fragment of human mask in pottery, from Stone-fort. (½)



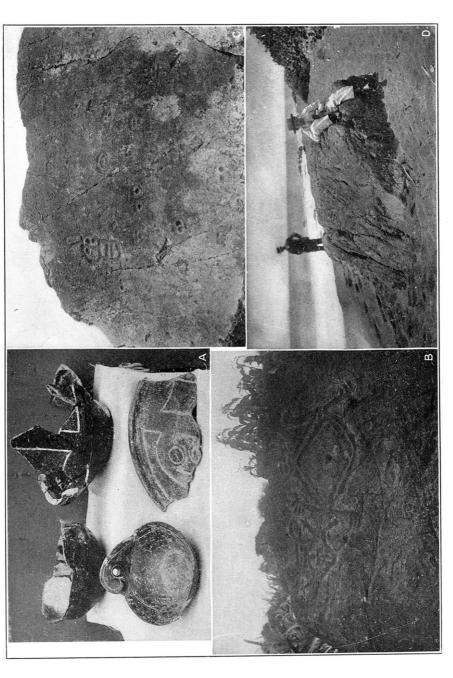
Fig. 28. — Turtle's head in pottery, from Two-mile Hill.

the form of a turtle's head. Another sherd bears what appears to be a prominent eye luted on.

The sherds belong to a variety of vessels and utensils. Fragments of circular baking tiles, an inch thick, with a slightly raised edge, are common. Very numerous sherds of soot-stained cooking pots point to a more or less globular form, but no exact restoration has been possible. The forms of vessels as existing or restored are best described by plates XXII (lower right-hand figure), XXIV, A, and figure 29. Platters, basins, bowls, and jars are the types thus far determined from the fragments. The bottoms are never convex, but are always flat or slightly concave. Several bottoms raised on a foot have been found. From the similarity of material and technique this foot has been provisionally assigned to the type of bowl represented in figure 29.

ROCK CARVINGS

The known petroglyphs of St Kitts occur at four places, but in one case the stone may have been brought to its present position in



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recent times. Photographs of some of the petroglyphs have been obtained, after darkening the incisions with charcoal and touching up the high lights with a whitish stone.

At Hart's bay, below West-Farm, there is a large rock (pl. XXIV, c) washed by the sea on one side, while the other side, facing

the north and sloping at about 45°, is covered with uncouth figures, many now almost effaced by weathering. The petroglyphs all represent human faces or figures. The incisions are deep, originally perhaps a quarter of an inch, and the rock is the ordinary trap of the island. While having this rock photographed the writer found a smaller one with simple faces cut in the same style (pl. xxiv, d). Both the east and west sides of this stone bear carvings. There are two kitchen middens within half a mile of this spot.

Up Stone-fort ravine, a few hundred yards from the road, the sides of the gut, here about fifty feet high, approach within ten or twelve feet and make a narrow gloomy gorge with perpendicular or overhanging walls. Along both sides are numerous grotesque human faces and occasionally figures, cut in the case-hardened gravel and sandstone. They are for the most part well out of reach, but it is not necessary to suppose that this indi-

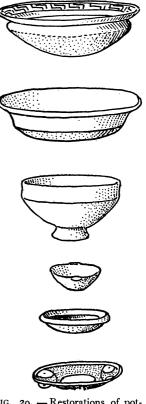


Fig. 29. — Restorations of pottery. $(\frac{1}{10})$

cates the fall of the stream-bed since they were made, for the artists had only a limited vein of sand affording a surface suitable for this work. The cliffs are mostly of coarse gravel, with large pebbles and rocks embedded. It must be admitted that with a hard stick it is comparatively easy to mark the sandstone, and some of the faces, low down on the west wall, were perhaps made or retouched by idle hands.

Local tradition has assigned an ancient date to the carvings; the story is that a battle having taken place between the English and French settlers, the latter were defeated and driven up the gorge. While hemmed in here, and before they were finally massacred, they amused themselves by sketching on the walls of their prison, according to the usual custom of historical prisoners. The stream bears the alternative name of Bloody river to this day. petroglyphs at this place number more than a hundred. Of the cer-

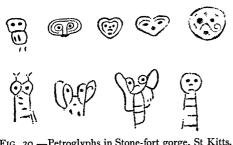


Fig. 30.—Petroglyphs in Stone-fort gorge, St Kitts.

tainly genuine Indian works, a few of the best preserved are represented in figure 30. They do not lend themselves to photography, although satisfactory plate eccentric showing two obtained. figures was There are other large and

comparatively elaborate heads which the writer hesitates to figure, although himself sure of their Indian origin, because of the slight doubt manifested by others on this point.

The finest example of rock carving probably in the Lesser Antilles occurs at Wingfield estate. In a cane-field, about thirty yards from the road up to the works, occur a group of bowlders of purely natural form and arrangement. The largest of these presents a flat surface, inclined at about 30° and facing almost north, on which are two figures, locally called the "Man and Woman." They measure 32 by 27 inches, and 24 by 18 inches, respectively (pl. XXIV, B). The chief lines are half an inch deep and two inches wide. The larger is a human figure with an enormous belly on which the navel is indicated. The head is small and simple, consisting of eyes and a mouth enclosed in a broad face, like some of the simple etched figures at Hart's bay and at Stone-fort, but in this case it The smaller figure, also human, has a large square has large ears. head with two curling plumes. The body is represented by a straight line intersecting a small circle. Both figures are drawn in a squatting posture, and the limbs are treated in the same conventional style as in some of the deep petroglyphs of British Guiana. A trace of a third face is seen on the right of the photograph.

At Willett's estate, on the north side of St Kitts, to the rear of the manager's house, is a flat, natural slab, 3 feet by 2 feet and 6 inches thick, bearing petroglyphs (see figure 31). It has been placed, no one knows when, by some gentleman with antiquarian instincts, on a rough masonry pedestal, with the view no doubt of preserving the carving; but in these utilitarian days the stone has

been found convenient in washing the clothes and in grinding the chocolate for the family, and in consequence the petroglyphs are almost effaced. It is with difficulty that the details of the chief figure can be made out; it is 10 inches long by 7 inches wide at the base; the lines are half an inch broad and were very shallow; they



Fig. 31. — Petroglyph at Willett's, St Kitts.

are now marked only by being still rough while the general surface of the rock is worn smoother. One may imagine that the figure represents the front view of a man sitting cross-legged. The head has large pendulous ears. There is another face on the rock, and traces of several others of the simple eyes-and-mouth type.

These rock engravings do not present much mutual resemblance With the exception of the Stone-fort faces, they are all cut in hard rock. The incisions are generally deep, especially the eye-holes. The eyes surrounded by circles, like goggles, are seen at Hart's bay and at Stone-fort. This form occurs in Jamaica. The general style of the Wingfield figures is that of the deep carvings of British Guiana. The Willett stone slightly resembles the petroglyph in St Vincent figured by Ober.

MIDDENS

The writer has been able thus far to locate the sites of six Indian settlements in St Kitts and two in Nevis.

The new road cut by Governor Haynes Smith round Stone-fort passes through the steep slope of the hill to reach the edge of the

¹ Duerden, Indian Remains of Jamaica.

² im Thurn, Among the Indians of Guiana.

³ Camps in the Caribbees.

shore-cliff, along which it then runs. The new cutting exposed a midden that was very rich in debris. Claws of the land-crab and occasionally of sea-crabs, shells of the whelk (*Turbo pica*), queenconch (*Cassis tuberosa*), king-conch (*Strombus gigas*), and several others, fish-bones, bones of birds and a small mammal are extremely plentiful, while fragments of shells and bits of coral and sherds of pottery complete the refuse. A few conch-shell implements have been recovered. No systematic excavation of this nor of any other midden has been undertaken.

In the field above West-farm estate fragments of Indian pottery were found in a roadside cutting. Within a few yards of this spot was an Indian grave.

Where the road passes through Two-mile hill, below Johnson's estate, fragments of pottery, broken shell, crab-claws, and shell implements are scattered freely on the field and in the roadside cutting. A shell spoon was picked up on the surface at the roadside, and conch-shell implements are particularly abundant on the fields in this vicinity.

At the edge of the road, in the field facing the village of Cayon, Indian pottery has been found associated with broken shells, etc. These four sites are in close proximity to streams.

In the field abutting Christ-church cemetery there is a rich deposit of aboriginal debris. Where the pits dug for "rain traps" expose a few feet below the surface, fragments of pottery, a stone bead, and a shell scoop have been found associated with crab-claws and fish-bones, as well as great quantities of small shells—nerita, monodonta, fissurella, joints of chiton, etc. The shells here found still retain their natural colors to a great extent.

In the field opposite St John's school may be found fragments of pottery of the same type as in the other middens, and associated with broken shell (mostly of the smaller kinds as at Christ-church), occasional fish-bones, and shell implements. An incisor of an agouti, and a piece of coral very much worn by rubbing at one margin were found here, and a piece of a stone baking-slab, a shell amulet, and a pendant were also procured from this site. These two last mentioned sites are on the northern side of St Kitts, far from any stream or other fresh water. Springs may be found in the mountains, but at a distance of more than a mile from either of these spots.

At Butler's estate, in Nevis, there is a field which has always borne the name of "Indian camp." On examination it proved to be profusely strewn with broken shell and very fragmentary pottery; indeed the latter was scarcely distinctive of Indian work.

At New River estate, in Nevis, Mr W. Maynard found a fine stone celt while having a trench dug. The writer afterward visited the spot in his company and found it to be undoubtedly a midden. A little digging was done and a number of fragments of pottery and several shell adzes were unearthed. The former afforded some good examples of Indian work.

The prevalence of fragments of coral among the Indian debris is significant. They were certainly used for filing, rasping, and smoothing objects of wood, or perhaps even shell and bone. One piece that shows decided marks of continued use has been collected. The flint flakes have already been commented on. Common waterworn pebbles with marks of hammering were very probably used by the Indians, but such protoliths are natural to man of all stages of culture, and no notice has been taken of them by collectors.

MORTUARY REMAINS

It has already been mentioned that pottery associated with human leg-bones were taken from a gut-side at West-farm. On visiting the place a few months later, the man who originally made the find was able to identify the exact spot, and excavation from the top of the little cliff revealed the skull, which, with as many of the bones as could be handled, were removed. Nothing else was found with them.

The body was buried facing the east, in a sitting position with the arms crossed and the fingers resting on the shoulders. face was upturned. The pottery had been placed evidently in front of the feet. The bones are those of a male adult. The occiput was flattened to such a degree that the outline of the back of the neck must have continued straight up to the vertex. Unfortunately, before the bones were prepared with glue to allow of handling and measuring, the facial and basal parts of the skull suddenly crumbled away. The earth of St Kitts appears to have a remarkably disintegrating effect on bone.

ST VINCENT,

WEST INDIES.